

101703

1449 PTO

NEEDLE & ROSENBERG, INC.  
Legal Department, DL429  
Intellectual Property Administration  
P.O. Box 7599  
Loveland, Colorado 80537-0599

ATTORNEY DOCKET NO. 10021234-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Patent Application Transmittal Letter

COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria VA 22313-1450

Sir:

Transmitted herewith for filing under 37 CFR 1.53(b) is a(n): ☒ Utility ☐ Design

☒ Original patent application,

☐ Continuation-in-part

**INVENTOR(S):** Michael Howard Leary; Danny E. Mars; Sungwon David Roh; Danielle R. Chamberlin; Ying-Lan Chang

**TITLE:** TUNNEL-JUNCTION STRUCTURE INCORPORATING N-TYPE LAYER COMPRISING NITROGEN AND A GROUP VI DOPANT

Enclosed are:

- ☒ The Declaration and Power of Attorney ☒ Signed ☐ Unsigned or partially signed  
☒ 6 sheets of drawings (one set) ☐ Associate Power of Attorney  
☒ Form PTO-1449 ☒ Information Disclosure Statement and Form PTO-1449  
☐ Priority document(s) ☒ Other: Nine (9) Cited Art Reference Other Fee: \$

CLAIMS AS FILED BY OTHER THAN A SMALL ENTITY				
(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) TOTALS
TOTAL CLAIMS	23 - 20	3	X \$18	\$54.00
INDEPENDENT CLAIMS	4 - 3	1	X \$86	\$86.00
ANY MULTIPLE DEPENDENT CLAIMS			\$290	
BASIC FEE: Design (\$340.00); Utility (\$770.00)				\$770.00
TOTAL FILING FEE				\$910.00
OTHER FEES				
TOTAL CHARGES TO DEPOSIT ACCOUNT				\$910.00

Charge \$910.00 to Deposit Account **50-1078**. At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account **50-1078** pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account **50-1078** under 37 CFR 1.16, 1.17, 1.19, 1.20 and 1.21. A duplicate copy of this sheet is enclosed.

"Express Mail" Label No.: EL992020388US

Date of Deposit: October 17, 2003

I hereby certify that this is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

Typed Name: Michael Laird

Signature: Michael Laird

Respectfully submitted,  
NEEDLE & ROSENBERG, P.C.

By Michael J. Tempel

Michael J. Tempel  
Attorney/Agent for Applicant(s)

Reg. No. 41,344

Date: October 17, 2003

Telephone No. 678-420-9300